Hiroshi Nakaso: The potential impact of large-scale monetary accommodation

Remarks by Mr Hiroshi Nakaso, Deputy Governor of the Bank of Japan, at the Paris Europlace Financial Forum, Tokyo, 25 November 2014.

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Introduction

It is a great honor to have this opportunity to speak today before the Paris Europlace Financial Forum.

In my remarks, after touching on the latest action taken by the Bank of Japan to expand quantitative and qualitative monetary easing, dubbed the QQE, I would like to share my views on the potential impact of large-scale monetary accommodation on the functioning of financial markets, with a special focus on Japan.

Monetary policy in major economies

Let me begin with our monetary policy.

In April last year, the Bank of Japan introduced the QQE to achieve the price stability target of 2 percent at the earliest possible time, with a time horizon of about two years. The main objectives of the QQE have been to dispel a view that took root among people over a long period of deflation that prices would not rise – in other words, a deflationary mindset – and to create a situation in which households and firms behave on the assumption that prices would moderately increase. Specifically, in terms of the policy transmission mechanism, we intend to raise inflation expectations through a strong and clear commitment to achieve the price stability target of 2 percent, and at the same time to exert downward pressure across the entire yield curve through massive purchases of government bonds. As a result, real interest rates will decline, thereby stimulating such private demand components as business fixed investment, private consumption, and housing investment. The upward pressure on prices will grow stronger as demand increases and the output gap narrows accordingly. Rises in actual inflation rates will be translated into higher expected rates of inflation and thus lower real interest rates. This will reinforce the virtuous cycle as the economy is provided with additional stimulus.

Since its inception, the QQE has been producing the intended effects, and Japan's economy has steadily followed a path towards the achievement of the price stability target of 2 percent. In fact, the year-on-year rate of change in the consumer price index (CPI) excluding fresh food, which stood at minus 0.5 percent in March 2013 immediately before introducing the QQE, subsequently turned positive and moved up to reach above 1 percent by the end of last year.

In recent months, however, a couple of developments on the price front have attracted our attention. First, the decline in demand following the consumption tax hike has been somewhat protracted in durable consumer goods including automobiles, as well as in housing investment. Second, crude oil prices have declined substantially after the summer. These factors have contributed to slowing the CPI inflation rates, which had hovered in the range of 1.0–1.5 percent since the end of the last year, down to 1.0 percent in September.

Of the two factors, the temporary weakness in demand associated with the consumption tax hike has already started to wane. Meanwhile, the decline in crude oil prices will have positive effects on economic activity and push up prices over the longer-run. Nevertheless, given the fact that Japan's economy is currently in a transition process of converting the deflationary mindset, prolongation of the current downward pressure on prices, albeit temporarily, was

judged to run the risk of delaying the process. To prevent such risk from materializing and to maintain the improving momentum of expectation formation, we decided to take preemptive actions to expand the QQE at the Monetary Policy Meeting held on October 31 (Chart 1).

Specifically, we decided to accelerate the pace of buildup in the monetary base by about 10–20 trillion yen to "an annual increase of about 80 trillion yen." In order to carry this out, we will increase the amount outstanding of the holdings of Japanese government bonds (JGBs) by about 30 trillion yen to "an annual increase of about 80 trillion yen." At the same time, we decided to extend the average remaining maturity of the JGB purchases by about three years at maximum to "about 7–10 years." The purpose of the measures is to leave operational flexibility to buy JGBs from across the maturity zones and thus effectively compress the entire yield curve in line with market conditions, whereas the downward pressure on the yield curve has been rather uneven thus far, with substantial declines in rates on the shorter end while rates on the longer end remain relatively high. In addition, as for exchange-traded funds (ETFs) and Japan real estate investment trusts (J-REITs), the increases in the amounts outstanding of the Bank's holdings will be tripled in both cases. The latest decision to expand the QQE will further strengthen the policy transmission mechanism that I mentioned at the outset. The decision is also intended to demonstrate and confirm our strong and unequivocal commitment to achieve the price stability target.

As we just heard from Governor Noyer, the European Central Bank has stepped up its monetary easing. And in the United States, the Federal Reserve concluded its asset purchase program but has maintained the view that the policy rate is likely to be kept at a near-zero level for a considerable time.

The unconventional monetary easing measures, taken by the central banks to address unprecedented challenges facing the economies, are often said to have had unintended, and even unfavorable, impacts on the functioning of financial markets. My quick response is that I do not fully agree. Although I do share the views that massive monetary easing would indeed have a considerable impact on the market and that central banks should be vigilant against market developments, thus far serious impairment of the market function has not been observed. In the rest of my remarks, I would like to elaborate on why I think this is the case by focusing on three topics: "search for yield" activities, negative interest rates, and market liquidity.

"Search for yield" activities

First I would like to address a frequently cited remark that unconventional monetary stimulus could destabilize financial markets and the economy at large by encouraging "search for yield" activities among investors and thus creating financial imbalances. As one of their transmission channels, unconventional monetary policy measures including the QQE aim to promote portfolio rebalancing by investors and thus push down the risk premium in prices of various asset classes. In this regard, one can say that a rise in asset prices and a decline in volatility are intended effects of the QQE.

In this context, I would stress instead that we should be mindful of the risk that "search for yield" activities enter into a self-fulfilling cycle and destabilize the markets and the economy. The combination of higher prices and the lower volatility of an asset induces investors to overvalue liquidity of the asset and drive up prices. This could in turn invite another round of investment, raising asset prices in a self-fulfilling manner. In addition, if a rise in asset prices creates overly bullish expectations among non-financial entities such as the corporate and household sectors, it could trigger excessive risk-taking behavior in these sectors as well.

Thus far, we have not observed signs of self-fulfilling, overheated price movements in Japan's financial markets. This is evidenced by occasional price adjustments reflecting factors such as geopolitical events, changes in the outlook on global economies, and policy changes in major economies. We also regularly check, in the *Financial System Report*, a "heat map" of financial activity indexes that helps us to gauge the macro conditions of

financial activity by combining a host of indicators in both the financial and non-financial sectors (Chart 2). The indexes, with few parts in red, suggest that currently no signs of financial imbalances are observed. Having said this, we will of course continue looking carefully for any signs of overheating in the financial markets.

Negative interest rates

Another development attracting attention in Japan's financial markets is seen in the negative interest rates of some financial products. The rates for treasury discount bills (T-Bills) declined to negative territory in September and remained there for most of the time since then (Chart 3). The payment of negative interest on securities sounds counter-intuitive and thus may prompt concern that Japan's financial markets are suffering a serious malfunction. If we look into the details of each transaction, however, we can see plausible reasons why investors have accepted negative interest rates.

Let me briefly mention a few cases where investors would buy T-Bills at negative interest rates. Commercial banks have an incentive to hold a certain amount of liquid short-term assets for the purpose of liquidity and duration risk management. Among various types of these assets, investors often prefer T-Bills because they are not only eligible collateral for borrowing from the Bank of Japan but also most suitable as collateral pledged against other money market and derivative transactions. Under the QQE, yields of liquid short-term assets have already approached zero across the board, and therefore even a small premium added to T-Bills could easily push their rates below zero.

Foreign investors have also played an important role in driving yen rates into negative territory. Since the summer of 2014, U.S. dollar funding rates implied in foreign exchange swaps have risen, as the net demand for dollars in the foreign exchange swap market has increased (Chart 3). This means that foreign investors with dollar cash liquidity can convert dollars into yen via a foreign exchange swap contract and borrow yen at a much cheaper rate. Since yen money market rates are already at almost zero, the yen funding cost for these investors would most likely turn negative. They can take advantage of the negative funding cost by investing in T-Bills even with negative rates. This investment strategy can still capture a reasonable margin if the yen swap costs are deeper in the negative. Market participants attribute higher dollar premium to both demand and supply factors. On the demand side, Japanese investors have shifted part of their portfolios into foreign currency-denominated assets following the QQE, which has boosted demand for dollars in the foreign exchange swap market. On the supply side, market participants point out that the lending attitudes of dollar providers have turned less accommodative ahead of the expected initiation of the Fed's tightening. Furthermore, not a few participants attribute this development partly to stricter international financial regulations, but the validation of this claim requires further exploration.

In sum, T-Bill rates have been pushed down to a negative level because they gather investor demand for a number of technical reasons, while yen short-term interest rates have already been as low as a near-zero level across the board. In this sense, negative interest rates represent the very effect of powerful monetary easing under the QQE.

Market liquidity

Lastly, I would like to turn to the issue of market liquidity. As I pointed out, putting downward pressure on the yield curve by absorbing JGBs from the market is a factor comprising the core mechanism of the QQE. Therefore, it seems fairly natural for the QQE to have certain impacts on price formulation and transactions in the market. Meanwhile, since the introduction of the QQE, market participants have often raised a concern that the massive purchase of JGBs under the QQE will impair the functioning of the JGB market. We have been aware that such concern has mounted following the recent expansion of the QQE. In what way should we address such concerns?

A complexity in this topic is that the term "market liquidity" could be used differently depending on the context. Indeed, there is no established and exclusive definition of market liquidity. However, this definition by the Bank for International Settlements appears to be widely known and accepted: "A liquid market is a market where participants can rapidly execute large-volume transactions with a small impact on prices."

A quick look at a few indicators along this line gives a somewhat encouraging picture of market liquidity. Transaction volume in JGB futures has been largely unchanged since the launch of the QQE (Chart 4). The ratio of daily price range to turnover, which approximates the price movement per transaction during the day, has remained stable at a low level, indicating there is just enough market liquidity (Chart 5). All in all, these indicators appear to suggest that activity in the JGB market has not been affected significantly by the QQE.

Nonetheless, there are a number of reasons why we cannot be sanguine about the functioning of the JGB market. For instance, our market intelligence has found episodes suggesting signs of deterioration in the functioning of the JGB and related money markets that were not detected from statistical data. An example is the occasional difficulty in borrowing on-the-run JGB. Besides, not a few participants point out that the JGB market functioning is undermined in the sense that the market has been overly focused on monetary policy as the factor driving prices instead of the outlook for the economy and inflation, which would otherwise be the fundamental determinant. This implies that a change in market expectations in the future course of monetary policy could exert a stronger impact on the markets. Although this is not an issue of market liquidity *per se*, it is certainly a factor that we should take into consideration when observing market developments.

Against this background, the Bank of Japan has been engaged in intensive dialogue with a wide range of market participants to grasp the state of market functioning. As an effort along this line, we have just announced several initiatives to enhance this dialogue, including the introduction of a quarterly *Bond Market Survey* of market participants' views on the functions of the bond market. We intend to publish the survey results.

Concluding remarks

The pursuit of unconventional monetary actions, that are meant to be "powerful" as Governor Noyer suggests, would inevitably boost the central bank's presence in the financial markets and create a resulting tradeoff between the intended policy consequences and the functioning of financial markets. To minimize the potential side effects on market functioning, the central bank should be committed to continuous dialogue with the market, so that it can share its views on its policy intention and its outlook for the economy and inflation, as well as accurately grasp participants' views on market developments. The Bank of Japan has been, and will continue to be, committed to these efforts.

Thank you very much for your kind attention.

Expansion of the Quantitative and Qualitative Monetary Easing

(Chart 1)

Accelerating the annual pace of increase in the monetary base from about 60-70 trillion yen to **" 80 trillion yen "**

Increasing the Bank's JGB holdings at an annual pace of about **80 trillion yen**: **" + 30 trillion yen "**

Extending the average remaining maturity of JGB purchases to **about 7-10 years**: **" + 3 years "**

Accelerating the pace of purchases of ETFs and J-REITs: **" Tripled "**

- Pre-empt manifestation of a risk that conversion of deflationary mindset, which has so far been progressing steadily, might be delayed
- Maintain the improving **momentum of expectation formation**

Heat Map of Financial Activity Indexes[1]

(Chart 2)

CY 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14

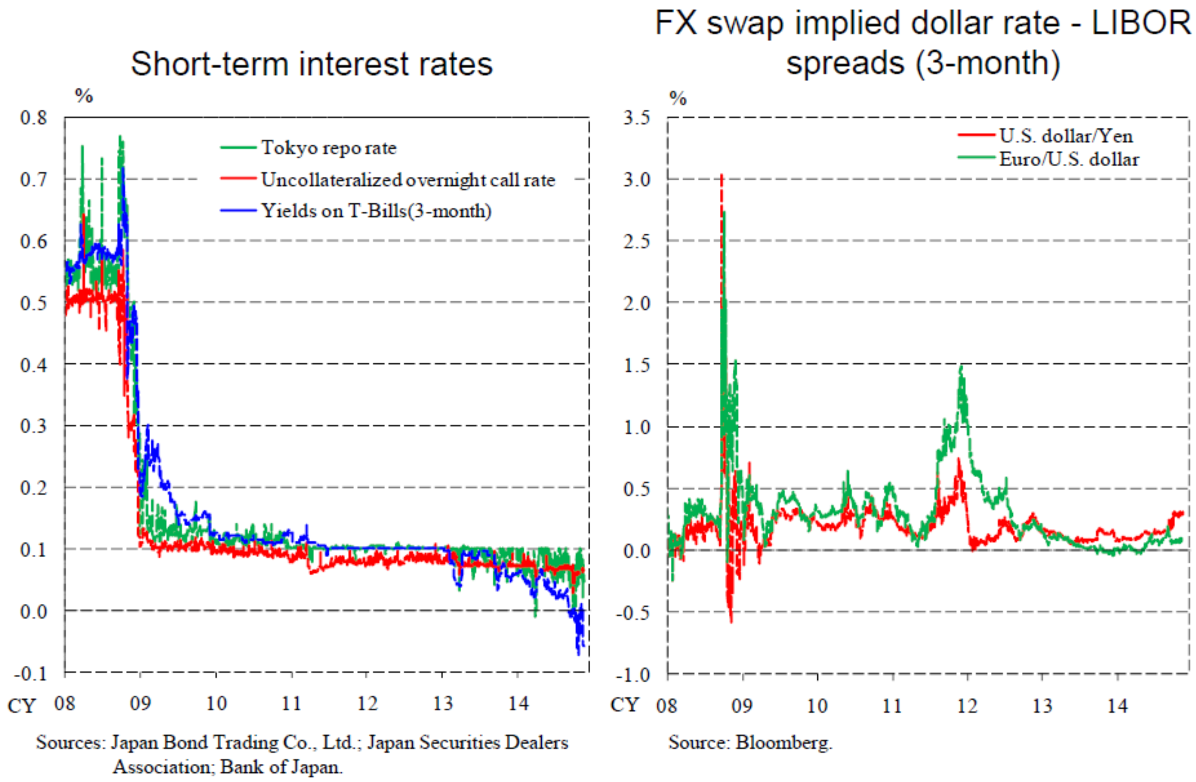
Financial institutions	DI of lending attitudes of financial institutions
	Growth rate of M2
Financial markets	Equity weighting in institutional investors' portfolios
	Stock purchases on margin to sales on margin ratio
Private sector	Private investment to GDP ratio
	Total credit-to-GDP ratio
Household	Household investment to disposable income ratio
	Household loans to GDP ratio
Corporate	Business fixed investment to GDP ratio
	Corporate credit to GDP ratio
Real estate	Real estate firm investment to GDP ratio
	Ratio of real estate loans to GDP
Asset prices	Stock prices
	Land prices to GDP ratio

Note: The FAIXs consist of 14 financial indicators and measure whether financial activity is overheating or overcooling, based on how far individual indicators deviate from their historical trends. Shaded areas represent the following: (1) areas shaded in red (the darkest shaded areas) show that an indicator has risen above the upper threshold, that is, it is tilted toward overheating; (2) areas shaded in blue (the second darkest shaded areas) show that an indicator has declined below the lower threshold, that is, it is tilted toward overcooling; (3) areas shaded in green (the most lightly shaded areas) show everything in between; and (4) areas shaded in white show the periods without data.

Sources: Bloomberg; Cabinet Office, "National accounts"; Japan Real Estate Institute, "Urban land price index"; Ministry of Finance, "Financial statements statistics of corporations by industry"; Tokyo Stock Exchange, "Outstanding margin trading"; BOJ, "Flow of funds accounts," "Loans and bills discounted by sector," "Money stock," "Tankan."

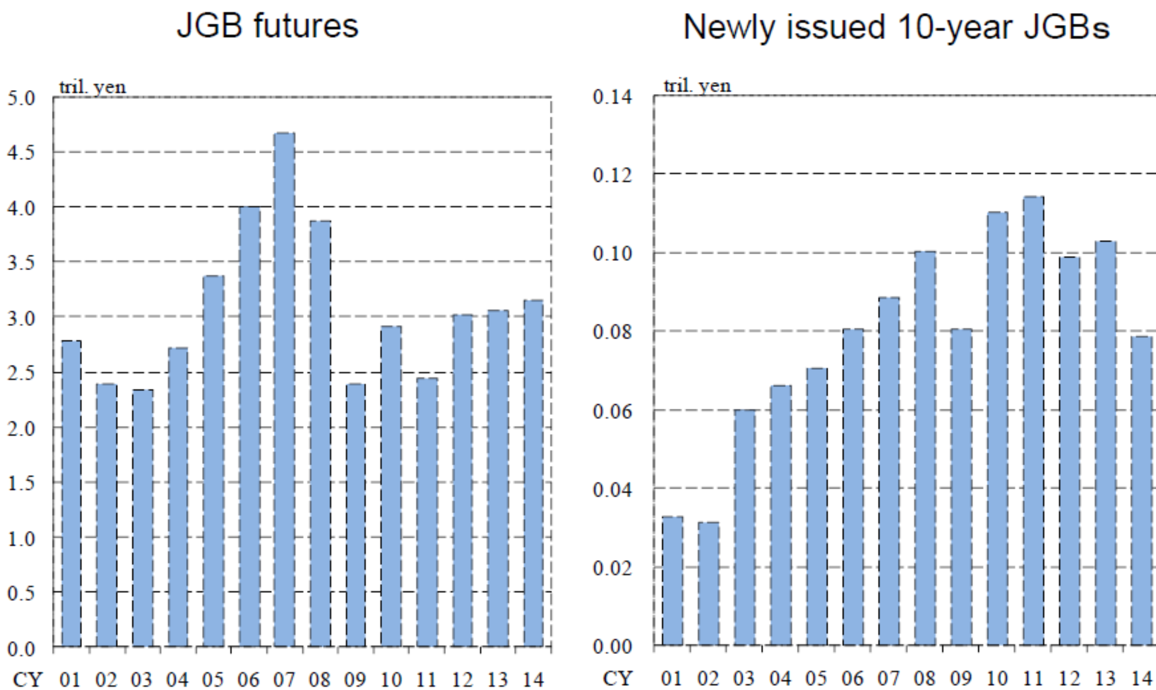
Short-Term Interest Rates

(Chart 3)



Average Daily Turnover

(Chart 4)

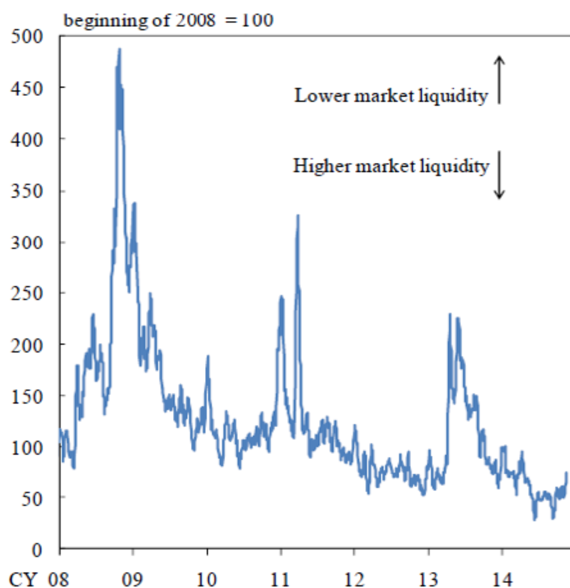


Source: QUICK.

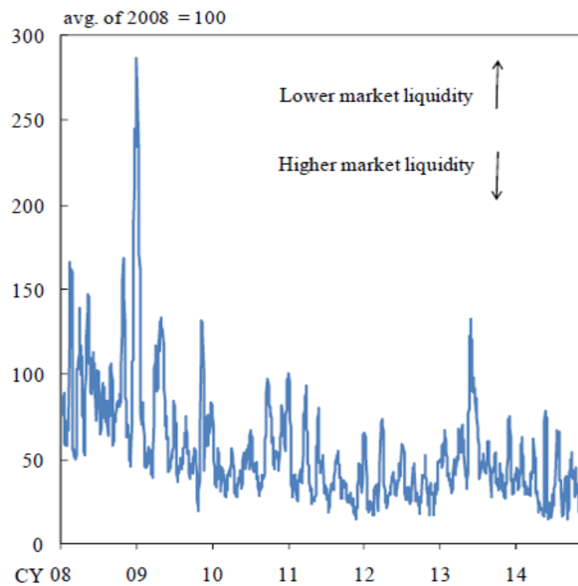
(Chart 5)

Daily Price Range to Turnover Ratio

JGB futures



Newly issued 10-year JGBs



Note: 10-day backward moving average.
Source: QUICK.